

ABSTRACT

A temperature-compensated piezoelectric oscillator that outputs a high-frequency signal having a constant oscillation frequency even if a power supply voltage is low is provided.

The temperature-compensated piezoelectric oscillator includes an AT-cut quartz crystal resonator (XD), an amplifying circuit (3) connected to one end of the quartz crystal resonator (XD), a varactor diode (VD) connected to the other end of the quartz crystal resonator (XD), and a temperature compensation voltage generation circuit (10) connected to ends of the varactor diode (VD) via resistors (R11) and (R12). The temperature compensation voltage generation circuit (10) includes a first voltage generation circuit (1) that includes thermistors (TH1) and (TH3) and resistors (R1) and (R3) and that is connected to the cathode of the varactor diode (VD); and a second voltage generation circuit (2) that includes a thermistor (TH2) and resistors (R2) and (R4) and that is connected to the anode of the varactor diode (VD).